

AMENDMENT TO THE CLAIMS

A listing of the claims presented in this patent application appears below. This listing replaces all prior versions and listing of claims in this patent application.

1. (Previously Amended) A drug delivery system comprising a contact lens having dispersed therein as nanoparticles an ophthalmic drug nanoencapsulated with an encapsulation material, wherein said encapsulation material is selected dependent upon ophthalmic drug characteristics wherein a hydrophobic encapsulation material is selected for a hydrophobic ophthalmic drug and a hydrophilic encapsulation material is selected for a hydrophilic ophthalmic drug; and wherein said ophthalmic drug is capable of diffusion into and migration through said contact lens and into the post-lens tear film when said contact lens is placed on the eye; wherein said diffusion provides extended or time-release delivery of said ophthalmic drug.

2. (Previously Amended) The drug delivery system of claim 1 wherein each said nanoparticle is less than 200 nm.

3. (Previously Amended) The drug delivery system of claim 2 wherein said nanoparticles are dispersed within said contact lens in an amount such that said contact lens remains optically transparent, wherein optically transparent is a degree of transparency equal to that of p-HEMA or other material employed as a contact lens and wherein said amount of nanoparticles is from about 1 to about 5%, by weight, based on the weight of the contact lens.

4. (Previously Amended) The drug delivery system of claim 1 wherein said contact lens comprises poly 2-hydroxyethylmethacrylate, and wherein the transmittance of visible light through said contact lens is at least 66%.

5. (Previously Amended) The drug delivery system of claim 1, wherein said hydrophilic encapsulation material is a liposome.

6. (Currently Amended) The drug delivery system of claim 1 wherein said ophthalmic drug is an antiparasitic, ~~an anti-protozoal~~[[,]] a steroid, a non-steroidal anti-inflammatory, an antibiotic or mixtures thereof.

7. (Previously Amended) The drug delivery system of claim 1 wherein said ophthalmic drug is nanoencapsulated with an encapsulation material in an oil-in-water emulsion hydrophobic encapsulation material is a microemulsion.

8. (Currently Amended) The drug delivery system of claim 7, wherein said encapsulation material ~~comprising~~ comprises: chitosan, human serum albumin, biodegradable poly(alkylcyanoacrylates), polybutylcyanoacrylate, polyhexylcyanoacrylate, polyethylcyanoacrylate, (polyisobutylcyanoacrylate), polycyanoacrylate, silica, PEG'ylated core-shell, biodegradable PLGA (poly(D,L-lactide-co-glycolide)), (poly lactic acid), PGA, PLG (poly(D,L-glycolide)) polymeric, microemulsion, liposomes, biocompatible gliadin, low pH sensitive PEG stabilized plasmid-lipid, biodegradable calcium phosphate, legumin, tocopherol derivatives stabilized emulsion, polysaccherides grafted with Polyesters (amphyphilic copolymers), PLA-PEG, hydrophilic proteins coupled with apolipoprotein E, biodegradable poly(ε-caprolactone), poly(methylidene malonate), gelatin, poly(E-caprolactone), sodium alginate, agarose hydrogel, PMMA, biotinylated poly(ethylene glycol) conjugated with lactobionic acid, carboxymethyl dextran magnetic, poly(vinyl alcohol) hydrogel, biotinylated pullulan acetate, diblock copolymers or mixtures thereof.

9. (Original) A method of administering an ophthalmic drug to a patient in need thereof comprising placing on the eye thereof the drug delivery system of claim 1.

10. (Original) A kit comprising:

- a) a first component containing at least one drug delivery system of claim 1, and
- b) a second component containing at least one storage container for said first component, said storage container additionally containing a material that substantially prevents said diffusion and migration of said ophthalmic drug during storage.

11. (Previously Amended) The kit of claim 10 wherein said material that substantially prevents said diffusion and migration of said ophthalmic drug is substantially saturated with an aqueous solution of said ophthalmic drug.

12. (Previously Amended) The kit of claim 11, wherein the kit is used for the storage and delivery of ophthalmic drugs to the eye of a patient in need thereof.

13. (Original) A method of preparing the drug delivery system of claim 1 comprising:

- a) providing said nanoencapsulated ophthalmic drug, and
- b) preparing said contact lens from materials that incorporate the nanoencapsulated ophthalmic drug, such that the nanoencapsulated ophthalmic drug is substantially uniformly dispersed throughout said contact lens.

14. (Original) An article of manufacture comprising packaging material and the ophthalmic drug delivery system of claim 1 contained within said packaging material, wherein said packaging material comprises a label which indicates that said ophthalmic drug delivery system can be used for ameliorating symptoms associated with pathologic conditions of the eye.

15. (Original) An article of manufacture comprising packaging material and the kit of claim 12 contained within said packaging material, wherein said packaging material comprises a label which indicates that said first component of said kit can be used for ameliorating symptoms associated with pathologic conditions of the eye and that said second component of said kit can be used for storage of said first component.

16. (Currently Amended) The drug delivery system of claim 6 wherein said antiparasitic ~~or anti-protozoal~~ drug is ivermectin, pyrimethamine or mixtures thereof.

17. (Previously Presented) The drug delivery system of claim 6 wherein said steroid is prednisilone acetate.

18. (Currently Amended) The drug delivery system of claim 6 wherein said non-steroidal anti inflammatory drug is acular, voltaren, or mixtures thereof.

19. (Currently Amended) The drug delivery system of claim 6 wherein said antibiotic drug is ciloxan, gentamycin, cephlosporin or mixtures thereof.

20. (Previously Presented) The drug delivery system of claim 1 wherein said ophthalmic drug is lidocaine, timolol, ciproflaxin, cyclosporin A, or pilocarpine.

21. (Previously Presented) The drug delivery system of claim 2 wherein said nanoparticles are dispersed within said contact from about 5 to about 20%, by weight, based on the weight of the contact lens.